EXPERIENCE

Software Engineer - AGS

2023 - Present

- Converted a legacy C# .NET Windows server application suite to Linux, repurposing it to be ran in a cluster. Developed a unique network negotiation algorithm for comparing financial data to determine consensus in the cluster. Cluster software was built for high tolerance against power and network loss, and was directly responsible for managing millions of USD in transactions.
- Independently developed C++ tools for deserializing network negotiation packets in the cluster for debugging and visualization
- Developed and maintained C++ Linux hardware plugins that were marshalled into C#, including printers, audio devices, touch interfaces, and USB devices.
- Maintained the product's Ubuntu Linux operating system image, scripts, build process, and in-house package management system. Supported other developers who relied on the OS image and packages.
- Maintained .NET and Unity code for the company's main product: core game engine logic, menu design, hardware plugins.

Software Engineer - USAF

2021 - 2023

- Maintained critical defense systems for the F-15 Eagle fighter jet, including the AWG-20 Programmable Armament Control Set, APG-68, and APG-70 Radar subsystems. Daily job duties involved handling Secret data.
- Wrote custom scripts and programs for easing the workload of other teams, such as parsing CSV files and exporting the data.
- Analyzed field requests from pilots and participated in an active Agile (SAFe) team for sprint planning.

SKILLS

- Languages: C, C++, C#, Rust, Bash
- Tools: Git, CMake, GCC, Vim, Visual Studio, Linux CLI
- Platforms: Linux, Windows, ESP32

PROJECTS

- Blitzcrank: Discord bot that interfaces with many different web APIs to fetch data and automate tasks, written in pure Rust.
- **CChat:** Chatroom app that uses a TCP server-client model, with an NCurses CLI frontend, written in pure C.
- **CLog:** A simple and easy to use C / C++ logging library that supports multiple logging levels, color per log level, and writing to an output file.

EDUCATION

University of Georgia

Athens, GA

BSc, Computer Engineering, minor in computer science